

1                                   **DIRECT TESTIMONY**

2                                   **OF**

3                                   **KEVIN C. HIGGINS**

4                                   **ON BEHALF OF**

5                                   **SOUTH CAROLINA MERCHANTS ASSOCIATION**

6                                   **DOCKET NO. 2002-223-E**

7                                   **INTRODUCTION**

8           **Q.     PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

9           A.     Kevin C. Higgins, 39 Market Street, Suite 200, Salt Lake City, Utah, 84101.

10          **Q.     BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

11          A.     I am a Principal in the firm of Energy Strategies, LLC. Energy Strategies is a  
12                  private consulting firm specializing in economic and policy analysis applicable to  
13                  energy production, transportation, and consumption.

14          **Q.     ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

15          A.     My testimony is being sponsored by the South Carolina Merchants Association  
16                  ("Merchants Association"). The Merchants Association is a retail trade  
17                  organization organized under the laws of the State of South Carolina. The  
18                  Merchant Association's members provide retail operations in all counties of the  
19                  state.

20          **Q.     WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
21                  **PROCEEDING?**

22          A.     I have been asked to evaluate the general rate case filing by South Carolina  
23                  Electric & Gas Company ("SCE&G" or the "Company"), with a particular

1 emphasis on rate spread and rate design issues. I also have been asked to propose  
2 any adjustments that might be necessary to ensure results that are just and  
3 reasonable.

4 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE AND**  
5 **QUALIFICATIONS.**

6 A. My academic background is in economics, and I have completed all coursework  
7 and examinations toward the Ph.D. in Economics at the University of Utah, and  
8 have served on the adjunct faculties of both the University of Utah and  
9 Westminster College, teaching both undergraduate and graduate courses in  
10 economics. I joined Energy Strategies in 1995, where I assist private and public-  
11 sector clients with energy-related economic and policy analysis, including  
12 evaluation of electric and gas utility rate matters.  
13 Prior to joining Energy Strategies, I held policy positions in state and local  
14 government. From 1983 to 1990, I was economist, then assistant director, for the  
15 Utah Energy Office, where I advised on, and helped implement, the State's  
16 energy policy. From 1991 to 1994, I was chief of staff to the chairman of the Salt  
17 Lake County Commission, one of the larger municipal governments in the  
18 western U.S., where I was responsible for development and implementation of a  
19 broad spectrum of public policy. A more detailed description of my qualifications  
20 is contained in Exhibit No. \_\_\_\_ (KCH-1), attached to this testimony.

21 **Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE ANY STATE**  
22 **REGULATORY COMMISSIONS?**

1 A. Yes, I have. Since 1984, I have testified in over thirty proceedings on the subjects  
2 of electric utility cost-of-service, rate design, energy policy, and industry  
3 restructuring before state utility regulators in Arizona, Colorado, Georgia,  
4 Michigan, Nevada, New York, Oregon, Utah, Washington, and Wyoming. I have  
5 also provided testimony on electricity pricing before the Federal Energy  
6 Regulatory Commission.

7 **Q. WHAT CONCLUSIONS HAVE YOU REACHED IN YOUR ANALYSIS**  
8 **OF SCE&G'S FILING?**

9 Based on my analysis of the Company's filing, I have reached the following  
10 conclusions:

11 (1) SCE&G is proposing to spread its requested rate increase in a manner that  
12 places a disproportionate and unreasonable burden on customers in the  
13 Medium class. Contrary to sound ratemaking principles, instead of moving the  
14 Medium customer class *toward* cost-of-service, SCE&G proposes a rate  
15 spread that deliberately moves this customer class *away* from cost-of-service,  
16 with customers in the Medium class being pushed substantially above their  
17 cost-of-service. The Company's rate spread proposal should be rejected in  
18 favor of a rate spread that does not create such cross subsidies. One means to  
19 remedy the Company's proposed inequity would be to direct the first \$4.2  
20 million of any Commission-ordered reduction in SCE&G's requested revenue  
21 requirement toward lowering the energy charge to customers in the Medium  
22 class.

1 (2) The energy charge portion of Rate 20, Medium General Service, is currently  
2 sold at a flat price per kwh for all volumes. I recommend adding a declining  
3 tailblock to this rate schedule that would lower the price for higher-volume  
4 usage. This change would be revenue-neutral to the other customer classes, as  
5 well as to SCE&G. The declining tailblock would be applicable to all  
6 kilowatt-hours greater than 75,000 per month, and would be priced at the  
7 energy charge for Large General Service, Rate 23.

8 (3) Rate 21, Medium General Service TOU, is in need of a rate design overhaul.  
9 A time-of-use rate should be designed to reward customers with load usage  
10 patterns that benefit the system, such as high-load-factor customers. In  
11 contrast, Rate 21 offers no incentive for high-load-factor customers to switch  
12 to it; indeed, the average price-per-kwh paid by customers on this rate  
13 schedule is actually *higher* than the average price on Rate 20, and a number of  
14 relatively high-load-factor customers who have switched from Rate 20 to Rate  
15 21 – with the apparent encouragement of SCE&G – have experienced  
16 increased rates as a result. I recommend modifying the design of this rate  
17 schedule to enable a high-load-factor customer to realize a reasonable savings  
18 relative to Rate 20 for making this switch. Specifically, I recommend a design  
19 that would enable a 70 percent load factor customer to save ten percent off the  
20 cost of Rate 20.

21 (4) SCE&G's proposed adjustment for fuel cost of \$.01678 per kwh is  
22 significantly higher than the Company's actual average fuel cost during the  
23 test year, indicating that the Company's proposed fuel charge will likely over-

1 collect the amount needed to recover its fuel costs. This situation distorts the  
2 Company's overall rates by unduly weighting the proportion of revenue  
3 collected through the energy component, which in turn unduly penalizes high-  
4 load-factor customers. SCE&G's adjustment for fuel cost should be reset,  
5 incorporating the effects of the Company's actual average fuel cost for the test  
6 year, adjusted for the \$.00044 reduction otherwise proposed by the Company.  
7 Any shortfall from the Company's approved revenue requirement caused by  
8 resetting the adjustment for fuel cost to the test year level should be recovered  
9 from energy and demand charges in proportion to their respective shares of  
10 non-fuel revenues.

11 (5) SCE&G's proposal to change its tariff to allow the Company, at its sole  
12 discretion, to charge a deposit for service to non-residential customers that  
13 experience a reduction in their credit should be rejected. The Company's  
14 proposal introduces an inappropriate degree of subjectivity into the  
15 determination of which customers must pay a deposit. Moreover, the  
16 Commission's own Rules and Regulations already provide for deposits from  
17 customers whose accounts are not paid on time. The Commission's approach  
18 of relying on an existing customer's actual track record is inherently fairer  
19 than the Company's proposed approach, and is the more appropriate basis for  
20 requiring deposits.

21 **RATE SPREAD**

22 **Q. WHAT IS SCE&G'S RATE SPREAD PROPOSAL?**

1 A. SCE&G is requesting an overall retail rate increase of \$105 million, or 8.5 percent  
2 over current rates.<sup>1</sup> On a percentage basis, the Company proposes to spread this  
3 increase as follows:<sup>2</sup>

4	Residential	7.06%
5	Small	13.81%
6	Medium	11.89%
7	Large	5.38%
8	Street Lighting	12.82%

9 **Q. WHAT IS THE BASIS FOR THE DIFFERENCES IN RATE INCREASES**  
10 **ACROSS CUSTOMER CLASSES PROPOSED BY THE COMPANY?**

11 A. SCE&G does not provide any explicit formulation for the proposed differences in  
12 rate increases across rate schedules. The Company simply offers a general  
13 statement that cost of service is the most important component of rate design, and  
14 that additional guidance is provided by considering value of service, rate history,  
15 revenue stability, improvement of system load factor, and optimum use of natural  
16 resources.<sup>3</sup> But exactly how these various factors were combined to arrive at the  
17 Company's proposed rate spread is something of a mystery in the record.

18 **Q. DOES SCE&G USE ANY EXPLICIT COST-OF-SERVICE**  
19 **BENCHMARKS IN DEFENSE OF ITS RATE SPREAD PROPOSAL?**

20 A. Yes. SCE&G witness John R. Hendrix states that "retail rates should produce  
21 rates of return among classes that bear a reasonable relationship to the overall  
22 retail rate of return." He goes on to note that the Company's rate spread proposal

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<sup>1</sup> Application, p. 3 and Exhibit D-II, p. 2, line 1, col. 5.

<sup>2</sup> Following Direct testimony of John R. Hendrix, Exhibit No. \_\_\_\_ (JRH-3).

1 produces rates of return for each class that are each within 10 percent of the  
2 overall retail rate of return.<sup>4</sup> Mr. Hendrix is apparently satisfied that if a customer  
3 class lands within plus or minus 10 percent of the Company's overall retail return,  
4 a reasonable outcome has been achieved.

5 **Q. WHAT ARE THE RESULTS OF THE "TEN PERCENT TEST" THAT**  
6 **MR. HENDRIX REFERENCES?**

7 A. The ratios of each customer class's return to the overall retail return, under both  
8 current and proposed rates, are shown in Table 1 below.<sup>5</sup> These particular ratios  
9 also give us insight into cost-of-service: if the utility is earning its authorized  
10 return, then a customer class that has a ratio of 100 percent is paying rates exactly  
11 equal to its class cost-of-service. Similarly, if a customer class has a ratio greater  
12 than 100 percent, then it is paying rates in excess of its cost-of-service.

13 **Table 1: Ratios of Class Return to Overall Retail Return**

14 **SCE&G Proposal**

15		Current Rates	SCE&G Proposed Rates
16	Residential	100%	96%
17	Small	92%	102%
18	Medium	101%	<b>109%</b>
19	Large	109%	102%
20	Street Lighting	96%	102%

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<sup>3</sup> Direct testimony of John R. Hendrix, p. 8, lines 10-17.

<sup>4</sup> *Ibid.*, p. 9, lines 16-21.

<sup>5</sup> *Ibid.*, Exhibit No.\_\_\_\_(JRH-3).

1 Since the ratio of each customer class's return to the overall retail return falls  
2 within the range of 90 percent to 110 percent, the Company deems the results to  
3 be reasonable.

4 **Q. DO YOU BELIEVE THAT THE COMPANY'S "TEN PERCENT TEST" IS**  
5 **A SATISFACTORY MEASUREMENT OF REASONABLENESS IN THIS**  
6 **PROCEEDING?**

7 A. No. A test such as the one Mr. Hendrix references is more applicable to a  
8 situation in which the rate spread proposal is moving customer classes *toward*  
9 cost-of-service, but due to diverse starting points for various classes, there is some  
10 question as to whether it may be in the public interest to move each class all the  
11 way to cost-of-service in one swift movement. Hence, a band of "plus or minus  
12 ten percent" can be an appropriate boundary to determine if customer classes – in  
13 moving toward cost-of-service – have come "close enough" to cost-of-service  
14 rates to be reasonable.

15 For example, assume that after an equal percentage rate increase to reach the  
16 utility's allowed return, customer class A would have a relative return ratio of 75  
17 percent (well below cost-of-service) and customer class B would have a relative  
18 return ratio of 130 percent (well above cost-of-service). There would be a clear  
19 presumption that moving each class towards its cost-of-service would be in the  
20 public interest; yet the ratemaking principle of gradualism would likely come into  
21 play here, suggesting that moving customer class A all the way to cost-of-service  
22 in one step could be too severe a rate impact. Consequently, a test such as the "ten  
23 percent test" being discussed here could be employed, in which both customer



1 class A and customer class B are *each moved toward cost-of-service*, but are  
2 stopped once they reached 90 percent and 110 percent, respectively, in order to  
3 mitigate the magnitude of the rate increase on customer class A. In this example,  
4 the “ten percent test” can be a useful benchmark.

5 However, the circumstances of SCE&G’s customers do not come close to fitting  
6 the example here, and SCE&G’s reference to the “ten percent test” is a  
7 misapplication of that tool.

8 **Q. WHY IS SCE&G’S REFERENCE TO THE “TEN PERCENT TEST” A**  
9 **MISAPPLICATION OF THAT TOOL?**

10 A. Because SCE&G uses the “ten percent test” to justify moving certain customer  
11 classes *away* from cost-of-service arbitrarily, rather than for establishing a zone of  
12 reasonableness in moving customers *toward* cost-of-service. Consider the current  
13 relative returns of each customer class in relation to where they wind up under the  
14 Company’s proposed rate spread. Note that the two customer classes that wind up  
15 furthest away from cost-of-service – Residential and Medium – each start with  
16 rates that are very close to the overall retail rate of return. SCE&G – without a  
17 formula or other explicit methodology – arbitrarily chooses to move these two  
18 classes further away from their respective costs-of-service, *creating* inequities for  
19 customers in the Medium class where none existed before. To the extent that the  
20 “ten percent test” plays any role here, it is nothing more than a limitation on the  
21 arbitrary discretion of the Company; yet that exercise of arbitrary discretion  
22 should not be permitted in the first instance.

1   **Q.     WHAT IS YOUR RECOMMENDATION TO THE COMMISSION**  
2       **REGARDING RATE SPREAD?**

3   A.     The Company’s proposal to create cross-subsidies at the expense of the Medium  
4           customer class should be rejected. Instead, the Commission should require that  
5           any customer class whose return is already above the overall rate of return *not be*  
6           *further disadvantaged* relative to the other customer classes. In other words, if a  
7           customer class has a relative return ratio greater than 100 percent under current  
8           rates, then the Commission should ensure that under the new rates that ratio  
9           would not be increased (except to the extent necessary to maintain parity with  
10          classes that started below 100 percent and whose ratios were also increased). I  
11          refer to this as the “no further harm” test. In the context of this proceeding, this  
12          means that, as an initial target, the Large customer class would not wind up with a  
13          relative return ratio greater than 109 percent, and the Medium customer class  
14          would not wind up with a relative return ratio greater than 101 percent.

15   **Q.     IN THE CONTEXT OF SCE&G’S FILING HOW CAN YOUR**  
16       **RECOMMENDATION BE IMPLEMENTED?**

17   A.     There are two basic approaches to implementing my recommendation: (1) adopt  
18           an **entirely new rate spread** that follows an explicit formulation that is  
19           reasonable and fair to all customer classes, including application of the “no  
20           further harm” requirement I have recommended above, or (2) **adjust** the  
21           Company’s proposed rate spread to comply with the “no further harm”  
22           requirement. In my view, either approach could provide acceptable results.

1 **Q. IF AN ENTIRELY NEW RATE SPREAD WERE ADOPTED, WHAT**  
2 **EXPLICIT FORMULATION WOULD YOU RECOMMEND?**

3 A. For the purpose of this question, I will use the revenue requirement requested by  
4 SCE&G as a baseline, so that the explicit formulation I am recommending can be  
5 compared on an “apples-to-apples” basis with the Company’s rate spread  
6 proposal. Of course, in using the Company’s proposed revenue requirement to  
7 demonstrate alternate rate spread approaches, I am in no way endorsing the  
8 Company’s requested revenue requirement. Indeed, as I will show below, to the  
9 extent that the Commission approves a revenue requirement that is below the  
10 Company’s request, it becomes easier to remedy the problems caused by  
11 Company’s over-allocation of revenue requirements to the Medium customer  
12 class.

13 The explicit formulation I recommend is presented in Exhibit No.\_\_\_\_(KCH-2),  
14 which is a modification of SCE&G Response to Staff Data Request 1-33(c), page  
15 1. The results are also summarized in Table 2 below. As a first step, each  
16 customer class should receive an equal-percentage revenue requirements increase  
17 (shown on page 1, line 2 of the exhibit). Next, the relative return ratios for each  
18 customer class that result from an equal percentage increase (line 29) should be  
19 examined, and the “no further harm” test should be applied (by comparing with  
20 line 30). In this instance, only one customer class fails this test, as an equal  
21 percentage increase raises the relative return ratio for the Large customer class  
22 from 109 to 111 percent.

**Table 2: Ratios of Class Return to Overall Retail Return**

**New Rate Spread w/ Explicit Formulation**

	Current Rates	Equal %	Final Adjusted
Residential	100%	99%	99%
Small	92%	91%	100%
Medium	101%	101%	100%
Large	109%	111%	102%
Street Lighting	96%	94%	100%

Continuing with step two, I adjust the relative return ratio for the Large customer class downward to no greater than 109 percent to comply with the “no further harm” test. In making this adjustment, it is also worthwhile to consider other factors, such as the need to consider the international competitiveness of customers in this class; this consideration had led SCE&G to propose a relative return ratio for the Large customer class of 102 percent. I concur with this point and make the same adjustment.

The third step is to raise to 100 percent the relative return ratios for those customer classes, which, after an equal percentage increase, are substantially below 100 percent, but nevertheless can reach 100 percent with an increase of 10 points or less (Small and Street Lighting). Finally, because the revenue reduction associated with reducing the Large customer class to 102 percent is slightly less than the revenue increase associated with increasing Small and Street Lighting classes to 100 percent, the balance is used to reduce the revenue requirements of the remaining classes (Residential and Medium).

1   **Q.     WHAT IS THE FINAL RATE SPREAD USING THIS APPROACH?**

2   A.     It is shown in the “Final Adjusted” column in Table 2 above, and in greater detail  
3           in Exhibit No. \_\_\_\_ (KCH-2), page 2, lines 27 through 29. This rate spread results in  
4           customer classes being far closer to cost-of-service than the Company’s proposal,  
5           with no class singled out for inequitable treatment.

6   **Q.     WHAT ARE THE ADVANTAGES OF THIS APPROACH?**

7   A.     The main advantage is that everybody is playing by the same set of explicit rules  
8           when it comes to absorbing a rate increase, while at the same time there is  
9           flexibility to adjust the percentage increase for any customer class that is  
10          significantly above or below cost-of-service.

11   **Q.     PLEASE DESCRIBE THE SECOND APPROACH TO RATE SPREAD**  
12          **THAT YOU REFERENCED, IN WHICH THE COMPANY’S PROPOSED**  
13          **RATE SPREAD IS ADJUSTED TO COMPLY WITH A REQUIREMENT**  
14          **THAT THERE BE “NO FURTHER HARM” TO CUSTOMER CLASSES**  
15          **WITH RELATIVE RETURN RATIOS ABOVE 100 PERCENT.**

16   A.     Under this approach we first identify the customer classes whose relative return  
17          ratios under current rates are greater than 100 percent: in this case, the Large (109  
18          percent) and Medium (101 percent) customer classes. Then, we examine Table 1  
19          to see whether the Company’s rate spread moves these customer classes *toward*  
20          100 percent (i.e., toward cost-of-service) or *away* from it. In the case of the Large  
21          customer class, the Company’s proposal moves the class toward 100 percent, i.e.,  
22          from 109 percent to 102 percent. Consequently, no adjustment is necessary. But  
23          in the case of the Medium customer class, the Company’s proposal moves the

1 class *away* from cost-of-service, from 101 percent to 109 percent. In this case, as  
2 an initial target, the relative return ratio for the Medium customer class should be  
3 brought back down to 101 percent.

4 **Q. WHY IS 101 PERCENT JUST AN “INITIAL” TARGET FOR THE**  
5 **MEDIUM CUSTOMER CLASS?**

6 A. The final target should also consider the relative return ratios proposed by  
7 SCE&G for the other customer classes. In this proceeding, SCE&G has proposed  
8 102 percent for the Large, Small, and Street Lighting classes. For the sake of  
9 consistency with these other classes, and overall fairness, I recommend a final  
10 target of 102 percent for the Medium customer class as well.

11 **Q. WHAT ADJUSTMENT IS NECESSARY TO BRING THE MEDIUM**  
12 **CUSTOMER CLASS DOWN FROM 109 PERCENT DOWN TO 102**  
13 **PERCENT?**

14 A. Under the Company’s requested overall revenue requirement, the revenues  
15 collected from Medium customer class would have to be reduced by  
16 approximately \$4.2 million. This calculation is shown in Exhibit No.\_\_\_\_(KCH-3).  
17 (See line 28). The revenue reduction to this class would have to be made up by  
18 those customer classes with Company-proposed relative return ratios below 102  
19 percent, in this case, the Residential class (96 percent). This adjustment would  
20 move the residential class to a relative return ratio of 97.5 percent – still below the  
21 overall retail return. The relative return ratios for the other classes – Small, Large,  
22 and Street Lighting – would each remain unchanged at 102 percent. These results  
23 are summarized in Table 3 below.

**Table 3: Ratios of Class Return to Overall Retail Return**

**Adjustment to SCE&G Proposal**

	Current Rates	SCE&G Proposal	Adjusted Rates
Residential	100%	96%	97.5%
Small	92%	102%	102%
Medium	101%	109%	102%
Large	109%	102%	102%
Street Lighting	96%	102%	102%

**Q. WHAT ADJUSTMENT IS NECESSARY TO BRING THE MEDIUM CUSTOMER CLASS BACK DOWN TO 102 PERCENT IF THE COMPANY’S PROPOSED REVENUE REQUIREMENT IS REDUCED IN THIS PROCEEDING?**

A. If SCE&G’s proposed revenue requirement is reduced in this proceeding, the relative return ratio for the Medium customer class can be brought back to 102 percent by earmarking the first \$4.2 million of any revenue requirements reduction for the Medium customer class. Any reduction beyond that amount should then be spread to all classes in such a manner as to retain the relative return ratios as described immediately above, i.e., residential at 97.5 percent, and each of other classes at 102 percent.

**Q. WHAT ARE THE MAIN ADVANTAGES OF THE “ADJUSTMENT” APPROACH?**

A. The main advantage of this approach is that it focuses on correcting the primary inequity in the Company’s rate spread proposal, i.e., the treatment of customers in

1 the Medium class. The approach is simple and straightforward, and has an  
2 inherently fairer outcome when compared with the Company's proposal.

3 **Q. IF THE FIRST \$4.2 MILLION OF ANY REVENUE REQUIREMENTS**  
4 **REDUCTION IS EARMARKED FOR THE MEDIUM CUSTOMER**  
5 **CLASS, WHAT SPECIFIC RATE ELEMENTS SHOULD BE REDUCED?**

6 A. I recommend that the \$4.2 million rate spread correction be used to reduce the  
7 Company's proposed energy charges for customers in the Medium class (rather  
8 than reducing the proposed demand charges).

9 **Q. WHY WOULD YOU DIRECT THE FIRST \$4.2 MILLION OF ANY**  
10 **REVENUE REQUIREMENT REDUCTION FOR THE MEDIUM**  
11 **CUSTOMER CLASS TO THE ENERGY CHARGE?**

12 A. SCE&G has expressed concern that the Medium customer class's load factor has  
13 declined over time.<sup>6</sup> Weighting the revenue requirement reduction toward the  
14 energy charge would provide relatively greater relief for those customers in the  
15 Medium class whose load factors are highest.

16 **DECLINING ENERGY CHARGE TAILBLOCK FOR RATE 20, MEDIUM**  
17 **GENERAL SERVICE**

18 **Q. HOW ARE ENERGY CHARGES RECOVERED IN RATE 20, MEDIUM**  
19 **GENERAL SERVICE?**

20 A. Rate 20 customers pay a basic facilities charge, a demand charge, and an energy  
21 charge. The energy charges are recovered through a flat kwh rate that is the same

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<sup>6</sup> SCE&G Response to Merchants Association Data Request 1-5.



1 for all volumes. The current energy charge is \$.02612 per kwh, and the  
2 Company's proposed energy charge is \$.02742 per kwh.

3 **Q. WHAT IS YOUR PROPOSAL REGARDING THE DESIGN OF THE**  
4 **ENERGY CHARGE FOR RATE 20?**

5 A. I recommend that a declining energy charge tailblock be adopted to reflect a  
6 lower cost per-kwh on higher-volume usage for Rate 20 customers. Declining  
7 tailblocks are a common feature in electricity tariffs around the country, including  
8 in the Southeast. From a rate design standpoint, the floor of the Rate 20 tailblock  
9 rate should be the energy charge for Rate 23, Industrial Power Service, which  
10 currently is \$.02364 per kwh, and which is proposed by SCE&G to be raised to  
11 \$.02458 per kwh. I recommend that a Rate 20 tailblock be adopted that would be  
12 applicable to all Rate 20 energy sales over 75,000 kwh per month and would be  
13 priced at the Rate 23 energy charge. This change would be designed to be  
14 "revenue-neutral" to the Company and other customer classes; i.e., the overall  
15 revenue requirement from Rate 20 would not be affected by this change. Below, I  
16 will address how this change can be implemented in a revenue-neutral manner.

17 **Q. WHY IS THE RATE 23 ENERGY CHARGE RELEVANT TO YOUR**  
18 **PROPOSED DECLINING TAILBLOCK FOR RATE 20?**

19 A. The Rate 23 energy charge is obviously compensatory at the margin to SCE&G –  
20 otherwise it would not be in the Company's proposed tariff. Moreover, Rate 20  
21 and Rate 23 have identical terms for "character of service" – thus there is no  
22 distinction (such as a line loss differential) between a kilowatt-hour generated to  
23 serve Rate 20 versus Rate 23. So long as the totality of the rate design for Rate 20

1 recovers its cost-of-service, it should not be a cause for concern to SCE&G if the  
2 energy charge for higher-volume Rate 20 sales is the same as for Rate 23.

3 **Q. HOW CAN A DECLINING TAILBLOCK BE IMPLEMENTED IN A**  
4 **REVENUE-NEUTRAL MANNER?**

5 A. Adopting a declining tailblock for Rate 20 would not change that rate schedule's  
6 overall revenue requirement; thus, all other things being equal, adding a declining  
7 tailblock would require making up the revenue lost (due to the declining tailblock)  
8 from the initial energy rate block (i.e., the first 75,000 kwh per month).

9 **Q. HAVE YOU PERFORMED A CALCULATION THAT SHOWS HOW**  
10 **MUCH THE INITIAL ENERGY BLOCK WOULD HAVE TO BE**  
11 **ADJUSTED TO ACCOMMODATE A DECLINING TAILBLOCK SET**  
12 **EQUAL TO THE RATE 23 ENERGY CHARGE?**

13 A. Yes. This calculation is shown in Exhibit No. \_\_\_\_ (KCH-4). As I have testified  
14 above, because SCE&G's proposed rate spread places a disproportionate and  
15 unreasonable burden on the Medium customer class, the revenue requirement for  
16 the Medium customer class should be reduced by at least \$4.2 million; of this  
17 amount, approximately \$4 million is associated with Rate 20.<sup>7</sup> I have also  
18 recommended that this reduction should be applied to the energy charge, which  
19 would bring the (flat) Rate 20 energy charge down to \$.02564 per kwh. The  
20 addition of a declining tailblock to the energy charge for monthly usage above

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<sup>7</sup> Based on Rate 20's share of total revenues in the Medium customer class.

1 75,000 kwh would require that approximately \$928 thousand be moved to the  
2 initial energy block, resulting in an initial block energy rate of \$.02631 per kwh.<sup>8</sup>

3 **DESIGN OF RATE 21**

4 **Q. WHAT IS THE NATURE OF RATE 21?**

5 A. Rate 21 is a time-of-use rate for medium-sized customers, generally for those who  
6 would otherwise be on Rate 20.

7 **Q. HOW IS RATE 21 DESIGNED?**

8 A. Rate 21 provides energy charges and demand charges that are differentiated by  
9 season (summer/non-summer) and time of day (peak/off-peak). The on-peak  
10 energy charges and on-peak/summer demand charges are priced at a premium  
11 relative to Rate 20; the on-peak/non-summer demand charge and off-peak/energy  
12 charge are priced at a modest discount relative to Rate 20; and incremental  
13 demand incurred during off-peak hours is priced at a significant discount relative  
14 to Rate 20.

15 **Q. DO YOU THINK THE DESIGN OF RATE 21 MAKES SENSE?**

16 A. Rate 21 does *not* make sense for high-load factor customers, the group for whom  
17 time-of-use rates are often intended. As currently designed, Rate 21 will really  
18 only work for customers whose usage *increases* during the off-peak period, such  
19 as a nighttime entertainment business.

20 My understanding is that SCE&G has promoted the use of this rate for high-load-  
21 factor customers, such as grocery stores – but Rate 21 simply will not benefit this  
22 group. I have analyzed Rate 21 for the ultimate high-load-factor customer – a

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<sup>8</sup> This calculation is applicable to the Company's proposed rates, but after incorporation of my proposed \$4 million reduction in the revenue requirement for Rate 20.

1 hypothetical customer with a 100 percent load factor – and have found that it is  
2 actually 6.7 percent more expensive than Rate 20 under current rates, and 7.3  
3 percent more expensive than Rate 20 under the Company’s proposed rates. These  
4 results are presented in Exhibit No. \_\_\_\_ (KCH-5).

5 Clearly, Rate 21 is not a rate that benefits high-load-factor customers, as a number  
6 of grocery stores that switched to this rate have found out. Indeed, the average  
7 per-kwh price paid by customers taking service under Rate 21 actually exceeds  
8 that of Rate 20,<sup>9</sup> a remarkable statistic for a time-of-use rate. Despite the  
9 contention of SCE&G’s witness Mr. Hendrix that the Company’s prices should  
10 encourage higher load factors,<sup>10</sup> something is certainly amiss here.

11 **Q. WHAT IS YOUR RECOMMENDATION REGARDING RATE 21?**

12 A. Rate 21 should be overhauled to make it attractive for high-load-factor customers,  
13 who benefit the overall system by improving the utilization of capital facilities. I  
14 recommend re-pricing the rate elements of this rate schedule to allow a high-load-  
15 factor customer to realize a reasonable savings relative to Rate 20 for making the  
16 switch to Rate 21. Specifically, I recommend a design that would enable a 70  
17 percent load factor customer to save ten percent off the cost of Rate 20.

18 **ADJUSTMENT FOR FUEL COST**

19 **Q. WHAT IS THE “ADJUSTMENT FOR FUEL COST”?**

20 A. SCE&G has a provision in each of its rate schedules called “adjustment for fuel  
21 costs” through which the Company recovers its fuel costs from retail customers.

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<sup>9</sup> SCE&G Response to Staff Data Request 1-34(d) shows that the average price-per-kwh for Rate 20 is \$.06475 and that of Rate 21 is \$.06627.

<sup>10</sup> Direct testimony of John R. Hendrix, p. 9, lines 2-3.

1           The adjustment for fuel costs is recovered on a cents-per-kwh basis as part of the  
2           energy charge in each rate schedule.

3   **Q.   WHAT ADJUSTMENT FOR FUEL COST IS SCE&G PROPOSING IN**  
4   **THIS PROCEEDING?**

5   A.   SCE&G is proposing an adjustment for fuel cost of \$.01678 per kwh, which is  
6           equal to the current fuel adjustment factor of \$.01722 per kwh minus \$.00044 per  
7           kwh, a reduction that the Company proposes in conjunction with its proposal to  
8           shift recovery of \$8 million in gas capacity charges to base rates.<sup>11</sup>

9   **Q.   WHAT IS THE RELATIONSHIP BETWEEN THE COMPANY'S**  
10   **PROPOSED FUEL ADJUSTMENT AND THE ACTUAL AVERAGE FUEL**  
11   **COST DURING THE TEST YEAR?**

12   A.   The actual average fuel cost during the test year was \$.014433 per kwh,<sup>12</sup>  
13           significantly less than the adjustment for fuel cost the Company is proposing in  
14           this proceeding, an indication that the Company's proposed fuel cost adjustment  
15           may be overstated. To the extent that the proposed adjustment for fuel cost is  
16           overstated, the Company's rate design will be inappropriately weighted towards  
17           the energy charge, unduly penalizing high load factor customers, who play an  
18           important role in helping the Company meet its stated goal of improving system  
19           load factor.<sup>13</sup>

20   **Q.   WHAT IS YOUR RECOMMENDATION TO THE COMMISSION**  
21   **REGARDING THE ADJUSTMENT FOR FUEL COST?**

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<sup>11</sup> Direct testimony of Carlette L. Walker, p. 17, line 15 – p. 18. line 2.

<sup>12</sup> SCE&G response to Staff data request 1-28.

<sup>13</sup> Direct testimony of John R. Hendrix, p. 8, lines 12 – 17.

1 A. SCE&G's adjustment for fuel cost should be reset, incorporating the effects of  
2 SCE&G's actual average fuel cost for the test year, adjusted for the \$.00044  
3 reduction otherwise proposed by the Company. Any shortfall from the  
4 Company's approved revenue requirement caused by resetting the adjustment for  
5 fuel cost to the test year level should be recovered from energy and demand  
6 charges in proportion to their respective shares of non-fuel revenues.

7 **SECURITY DEPOSITS**

8 **Q. WHAT IS SCE&G'S NEW PROPOSAL REGARDING SECURITY**  
9 **DEPOSITS?**

10 A. SCE&G is proposing a change to its tariff that would allow the Company, at its  
11 sole discretion, to charge a deposit for service to non-residential customers who  
12 experience a reduction in their credit standing.

13 **Q. DO YOU AGREE WITH THIS PROPOSAL?**

14 A. No. The Company's proposal introduces an inappropriate degree of subjectivity  
15 into the determination of which customers must pay a deposit, allowing the  
16 Company to demand substantial deposits from existing customers irrespective of  
17 the customers' payment histories; to make matters worse, the deposit  
18 requirements will come at times when the customers – South Carolina businesses  
19 employing South Carolina residents – are economically vulnerable. The  
20 Company's recommendation is not a good policy, and it should be rejected by the  
21 Commission.

1           Moreover, the Commission’s own Rules and Regulations already provide for  
2           deposits from customers whose accounts are not paid on time.<sup>14</sup> The  
3           Commission’s approach of relying on an existing customer’s actual track record is  
4           inherently fairer than the Company’s proposed approach and is the more  
5           appropriate basis for requiring deposits.

6           **SUMMARY**

7           **Q.     PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE**  
8           **COMMISSION.**

9           A.     I make the following recommendations applicable to this proceeding:

- 10           (1) SCE&G is proposing to spread its requested rate increase in a manner that  
11                 places a disproportionate and unreasonable burden on customers in the  
12                 Medium class, with customers in this class being pushed substantially above  
13                 their cost-of-service. The Company’s rate spread proposal should be rejected  
14                 in favor of a rate spread that does not create such cross subsidies. One means  
15                 to remedy the Company’s proposed inequity would be to direct the first \$4.2  
16                 million of any Commission-ordered reduction in SCE&G’s requested revenue  
17                 requirement toward lowering the energy charge to customers in the Medium  
18                 class.
- 19           (2) The energy charge portion of Rate 20, Medium General Service, is currently  
20                 sold at a flat price per kwh for all volumes. I recommend adding a declining  
21                 tailblock to this rate schedule that would lower the price for higher-volume  
22                 usage. This change would be revenue-neutral to the other customer classes as

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<sup>14</sup> Public Service Commission of South Carolina, “Rules and Regulations Governing Service Supplied by Electric Systems in South Carolina,” Section 103-331.

1 well as to SCE&G. The declining tailblock would be applicable to all  
2 kilowatt-hours greater than 75,000 per month, and would be priced at the  
3 energy charge for Large General Service, Rate 23.

4 (3) Rate 21, Medium General Service TOU, is in need of a rate design overhaul. I  
5 recommend modifying the design of this rate schedule to enable a high-load-  
6 factor customer to realize a reasonable savings relative to Rate 20 for  
7 switching to Rate 21. Specifically, I recommend a design that would enable a  
8 70 percent load factor customer to save ten percent off the cost of Rate 20.

9 (4) SCE&G's proposed adjustment for fuel cost of \$.01678 per kwh is  
10 significantly higher than the Company's actual average fuel cost during the  
11 test year, indicating that the Company's proposed fuel charge will likely over-  
12 collect the amount needed to recover its fuel costs. SCE&G's adjustment for  
13 fuel cost should be reset, incorporating the effects of the Company's actual  
14 average fuel cost for the test year, adjusted for the \$.00044 reduction  
15 otherwise proposed by the Company.

16 (5) SCE&G's proposal to change its tariff to allow the Company, at its sole  
17 discretion, to charge a deposit for service to non-residential customers that  
18 experience a reduction in their credit should be rejected. The Commission's  
19 approach of requiring deposits based on an existing customer's actual track  
20 record is inherently more fair than the Company's proposed approach, and is  
21 the more appropriate basis for such requirements.

22 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

23 **A.** Yes, it does.